

WHAT IS CLAIMED IS:

1. A process for purifying exhaust gas from gasoline engines comprising a step of purifying exhaust gas from a gasoline engine of a fuel-direct-injection type by contacting said exhaust gas with an exhaust-gas purifying-use catalyst that contains a noble metal,

wherein said gasoline engine of a fuel-direct-injection type is one which allows fuel to be directly injected inside a cylinder of the engine, and

wherein the exhaust gas varies between a first exhaust gas state having an exhaust-gas temperature in a range of 350 to 800°C at an inlet of the catalyst and a second exhaust gas state that forms a more oxidizing, low-temperature atmosphere as compared with the first exhaust gas state, depending on changes in air-fuel ratio, the second exhaust gas state having an exhaust-gas temperature in a range of 200 to 500°C at the inlet of the catalyst.

2. The process for purifying exhaust gas from gasoline as defined in claim 1, wherein the exhaust gas is purified by removing hydrocarbon, carbon monoxide and nitrogen oxides from the exhaust gas by the use of the catalyst.

3. The process for purifying exhaust gas from gasoline engines as defined in claim 1, wherein the first exhaust gas

state appears when the air-fuel ratio is in the range of 13 to 15, and the second exhaust gas state appears when the air-fuel ration exceeds the above-mentioned air-fuel ratio.

4. The process for purifying exhaust gas from gasoline engines as defined in claim 3, wherein the second exhaust gas state appears when the air-fuel ratio ranges from more than 15 up to 50.

5. The process for purifying exhaust gas from gasoline engines as defined in claim 1, wherein the catalyst includes at least one kind of noble metals, selected from the group consisting of platinum, palladium, rhodium, and iridium.

6. The process for purifying exhaust gas from gasoline engines as defined in claim 1, wherein the catalyst includes platinum and/or iridium.

7. The process for purifying exhaust gas from gasoline engines as defined in claim 1, wherein said catalyst further comprises a transition metal.